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Accepted for publication 10 October 1995.

Successful treatment of donovanosis with ciprofloxacin

Antibiotic treatment of donovanosis has been empirical, and includes tetracycline,[1] chloramphenicol[2] and cotrimoxazole.[3] More recently, workers in Australia have described successful use of daily injections of cefriazone.[4] Treatment has sometimes depended on the responsiveness of the organism to the antibiotic available in the geographical area concerned.[5] The causative organism, *Calymmatobacterium granulomatis*, a gram negative encapsulated bacterium is difficult to grow on artifical media thus limiting in vitro antibiotic sensitivity studies.

We have succesfully treated donovanosis with ciprofloxacin and report our first case. A 38 year old male from Zambia presented with a ten day history of two painless ulcers on the penis, and no other complaints. He had been in a relationship for one year with his girlfriend, who was in Zambia. Their last sexual intercourse was three weeks prior to presentation. He denied having any other sexual partner during this year.

General examination was unremarkable. His skin and oral mucosa showed no abnormality. He had swollen non tender right inguinal lymph nodes and two ulcers on the prepuce, each about a centimeter in diameter which were clearly demarcated, had thickened edges and minimal granulation tissue. Dark ground microscopy, serological tests for *Treponema pallidum*, culture for *Haemophilus ducreyi*, and herpes simplex virus cell cultures were performed. Five days later, the penile ulcers had increased in size, still with well defined edges (fig 1). Dark ground microscopy for *T pallidum* was again negative. We suspected donovanosis and a biopsy of the edge of one of the ulcers was performed. The patient was started on a two week course of oxytetracycline 500 mg qds orally, but on its completion there was no notable change in the size or appearance of the ulcers. The result of the initial investigations were all negative, but donovanosis was identified on a Giemsa stained specimen (fig 2) and confirmed on histology. In view of this failure to respond to oxytetracycline, we decided to try him on ciprofloxacin, since this has a wide spectrum of activity and is particularly active against gram negative organisms. Commencement on ciprofloxacin 500 mg bd orally was followed by a marked response in the first 7 days, and complete re-epithelisation of the penile ulcers within 2 weeks.

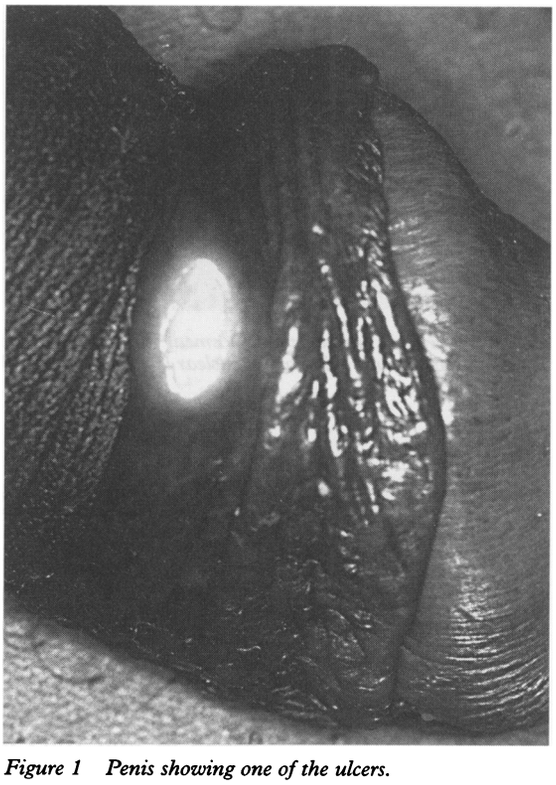

Figure 1 Penis showing one of the ulcers.

Following this experience, we have successfully used ciprofloxacin as first line treatment in two other patients with genital ulcers cytologically and histologically confirmed as donovanosis. These patients also experienced complete re-epithelisation of their genital ulcers within 2 weeks of starting ciprofloxacin. None of the patients reported any adverse effect from the drug. We would recommend ciprofloxacin as drug of first choice in the treatment of early donovanosis, since it it very effective, inexpensive, and relatively free from adverse effects.

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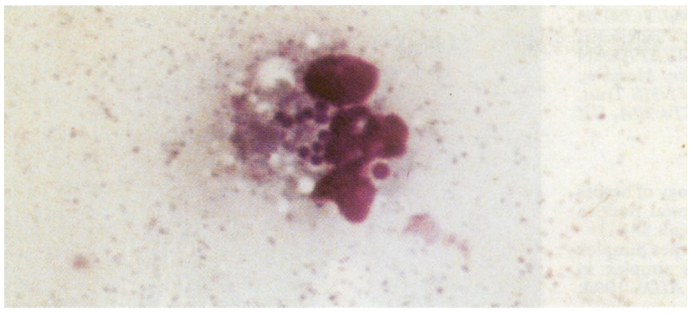

Figure 2 Giemsa stained cytology smear from the ulcer showing intracytoplasmic Donovan bodies in a polymorphonuclear leucocyte. (× 400)

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Gonorrhoea in HIV seropositive homosexual men attending an East London genitourinary medicine clinic

The UK Government's White Paper published in July 1992 identified HIV/AIDS and sexual health as a key area within the national strategy for improving the health of the nation[1] and recommended using the incidence of gonococcal infection as an indicator of potential HIV transmission within the community. The decline in gonorrhoea through the 1980s has been interpreted as an indicator for the success of health education programmes and a change in sexual practices.[2 3] During 1990, an increase in male rectal gonorrhoea was taken as evidence of a return to unsafe sexual practices among homosexual men.[4 5] It has been strongly argued, however, that an increase in gonorrhoea among homosexual men does not necessarily imply an increase in unsafe sexual practices because rectal or urethral gonorrhoea may be acquired as a result of orogenital or non-penetrative anogenital contact which are not considered to be high risk behaviour with respect to HIV infection.[6 7] Recent reports of HIV acquisition by oro-penile contact[8 9] question this assumption.

Gonococcal isolates (56) were collected from 46 homosexual men attending the Genitourinary Medicine Clinic at the Royal London Hospital over a one-year period. Case notes were reviewed retrospectively. Twenty two of the 46 patients had had an HIV antibody test within the past three years: seven were seropositive (32%) and 15 seronegative (68%). In addition, one patient was presumed to be HIV antibody seropositive but had never been tested. He was seen regularly in the HIV clinic with his seropositive partner and had HIV-associated symptomatology. The other 23 patients (50%) had never had an HIV antibody test and declined one at presentation with their gonorrhoea.

Analysis of the sexual practices of the seven known HIV antibody positive patients showed that five practised unprotected orogenital intercourse with casual male partners and one of these men had also had unprotected insertive and receptive anal intercourse with a casual partner within the last three months. Six HIV antibody positive patients identified regular male partners with whom they practised orogenital sex without using condoms. Five of these six also practised anal intercourse with their regular male partners, three patients always using condoms, one patient using them only occasionally and one not using condoms as his regular male partner was also HIV seropositive. The HIV serostatus of the other five regular male partners was unknown. The one presumed HIV antibody positive patient used condoms during orogenital intercourse with his HIV antibody positive male partner and did not practise anal intercourse. There were insufficient data in the notes to comment on the likely role of rimming and penile-anal contact on the transmission of gonorrhoea within our patient population.

The seven HIV seropositive patients had *Neisseria gonorrhoeae* isolated from the following sites: urethra only (4), rectum only (1), throat only (1) and the combined sites of throat and rectum (1). Throat cultures for *N gonorrhoeae* were negative in five of the seven patients and rectal cultures negative in four. The one presumed HIV seropositive patient had *N gonorrhoeae* isolated from his urethra but not from his throat.

The data show that most of the HIV antibody positive patients with gonorrhoea seen at our clinic use condoms with their regular partners for anal intercourse but have unprotected orogenital intercourse with both regular and casual male partners. This probably reflects the widely held belief that oral sex is "safe" in terms of HIV transmission. We have no data to indicate whether intra-oral ejaculation occurred during orogenital intercourse, a factor which would clearly increase the HIV transmission risk. Appropriate health education on the risks of HIV transmission should be given to all HIV seropositive patients in view of recent reports on HIV transmission through fellatio.[8 9]

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Accepted for publication 14 September 1995.